## WHAT IS CLAIMED IS:

- 1. A duplex optical transmission-reception module comprising:
  - (a) an optical fiber;
- (b) a light-receiving element which corresponds to the optical fiber for receiving optical energy transmitted through the optical fiber from a distal end and converting the optical energy into electric energy which is output from an output terminal; and
- (c) a light-emitting element connected on the lightreceiving element, a center of the light-emitting element being
  projectively aligned with a center of the end face of the optical fiber,
  whereby when the light-emitting element is energized to project
  light beam outward, the light beam is projected right to the end
  face of the optical fiber and input to the optical fiber, the light
  beam being transmitted along the optical fiber to the distal end to
  be received by another receiver to output a signal, no refractive
  element being disposed between the optical fiber, the lightreceiving element and the light-emitting element.
- 2. The duplex optical transmission-reception module as claimed in claim 1, wherein the light-receiving element is a photodiode.
- 3. The duplex optical transmission-reception module as claimed in claim 1, wherein the light-emitting element is a light-emitting diode.
- 4. The duplex optical transmission-reception module as claimed in claim 1, wherein the optical fiber is connected with a

connector which is correspondingly inserted in a first end of a housing, the light-receiving element being firmly disposed at a second end of the housing.

5. The duplex optical transmission-reception module as claimed in claim 1, wherein a focusing section is connected on top face of the light-emitting element, the light beam emitted from the light-emitting element being focused by the focusing section to project the end face of the optical fiber.